

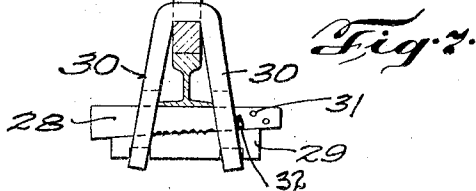
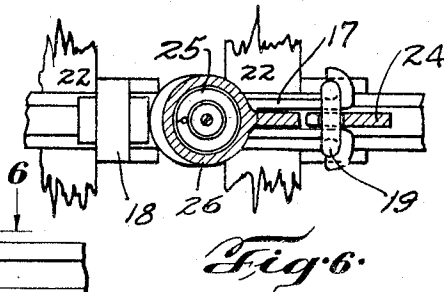
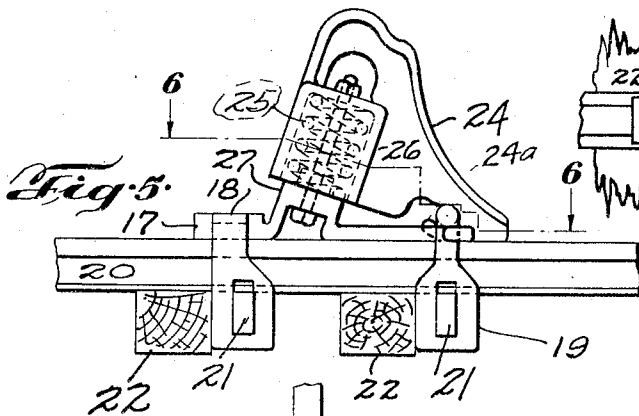
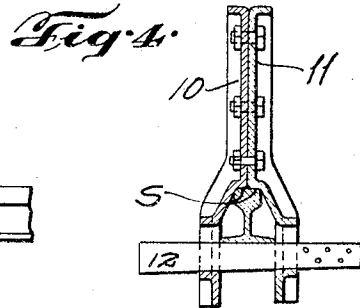
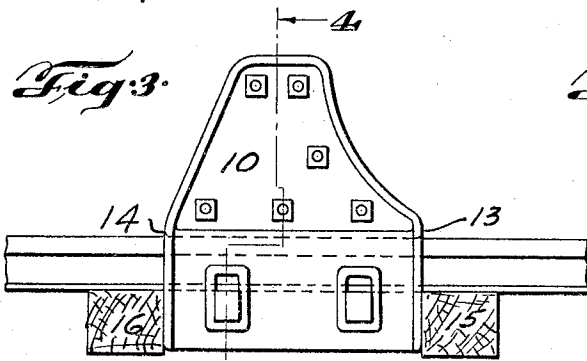
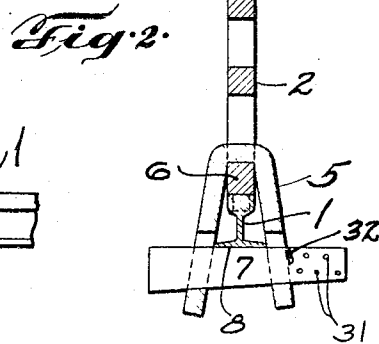
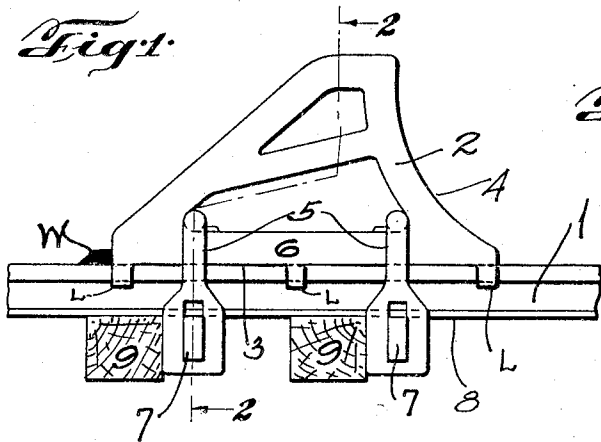
March 7, 1933.

A. H. TOLD

1,900,210

WHEEL STOP

Filed July 30, 1932



INVENTOR
Arnold H. Told
By Rodney Bedell
ATTORNEY

UNITED STATES PATENT OFFICE

ARNOLD H. TOLD, OF CHICAGO, ILLINOIS

WHEEL STOP

Application filed July 30, 1932 Serial No. 626,885.

The invention relates to devices applicable to railway tracks, and more particularly to the rail itself, for engaging car wheels to stop the movement of the car along the track.

5 Wheel stops, chocks or rail clamps for this purpose have long been in use and their general objects will not be detailed here as all those working in the railway field are familiar therewith.

10 The objects of the present invention are to provide a simple economical structure which may be readily applied to a rail without any drilling or other work on the rail; to provide means for easily and securely clamping or
15 attaching the wheel stop to the rail; and to adapt the device for rails of different sizes without requiring the use of interchangeable parts for different sized rails.

20 These objects are attained by the structure illustrated in the accompanying drawing in which—

Figure 1 is a side elevation of one form of the invention, showing it applied to a section of track.

25 Figure 2 is a vertical transverse section taken on the line 2—2 of Figure 1.

Figure 3 is a side elevation of another form of the invention.

30 Figure 4 is a vertical transverse section taken on line 4—4 of Figure 3.

Figure 5 is a side elevation of another form of the invention.

35 Figure 6 is a horizontal section and view taken on the line 6—6 of Figure 5.

Figure 7 illustrates a modified form of wedge structure which may be used in any forms of the invention shown in the other figures.

40 Each of the figures shows the invention applied to a section of ordinary rail 1 which is not a part of the invention although the latter is only useful when applied to the rail. In Figure 1, the main or body part of the device consists of an upright casting or
45 forging 2 having a lower edge 3 arranged to overlie the top face of the rail 1 throughout the length of the body. The front edge 4 of the body is shaped to correspond to the contour of a car wheel. Guide lips L depend
50 from the sides of the body. A pair of in-

verted V-shaped yokes 5 straddle the lower element 6 of the body and project downwardly at the sides of the rail and to a point below the latter. A key 7 extends transverse-
55 ly of each yoke across the lower portion thereof and through suitable openings provided in the arms of the yoke at a level which positions the key so that it may engage the lower face
60 8 of the rail flange and as the key is driven home it wedges the yoke 5 and member 2 tightly against the top of the rail whereby
65 an attempt to move member 2 along the rail will be effectively resisted by friction between them. This friction will be increased because
70 of the tendency of any movement of member 2 along the rail to cant yokes 5 at an angle thereby cooperating with the wedge structure
75 to tightly hold the wheel stop in position.

To further resist movement of the device along the rail, yokes 5 are so spaced longitudinally of the device and are so shaped that
80 each is arranged to engage an upright face of a respective cross tie 9.

The legs of the yokes engage the edges of the rail flange and when the device is tight-
85 ened, the yokes not only hold member 2 against movement longitudinally of the rail but also hold it upright against forces tending to overturn it.

90 Figures 3 and 4 illustrate a modification in which two complementary upright members 10 and 11 are secured to each other throughout a substantial portion of their height and are shouldered as indicated at S
85 to rest on top of the rail head. The sides of the shouldered portions extend downwardly from the upper portions of the device to a point below the bottom of the rail where
95 they are engaged by a tapered key 12 serving as a wedge to force the device downwardly as far as possible. In this structure the front and rear edges 13 and 14 of the upstanding plate members are disposed
100 to contact with the rear and front edges respectively of the cross ties 15 and 16 to cooperate with the wedging keys to prevent movement of the device along the rail.

The device shown in Figures 5 and 6 includes a body member 17, overlying the rail substantially throughout the length of the

device, yokes 18 and 19 straddling member 17 and the rail 20 with their lower ends constructed to receive keys 21 and to engage the cross ties 22. Member 17 is grooved vertically near its forward end and the wheel engaging body member 24 has a hook 24a extending into the groove and under the crossbar of yoke 19 whereby member 24 is pivoted at the forward end of member 17 and a coil spring 25 is received in the housing 26 provided in part 24 and is seated upon a boss 27 provided therefor on member 17.

This structure provides a yielding wheel stop but utilizes the same wedge attaching member common to all of the forms of the invention.

Figure 7 illustrates a modification of the wedge structure in which the key 28 is more slender and a cooperating key or shim 29 is notched to fix its position transversely of the depending elements 30. If desired, the opposing faces of elements 28 and 29 may be serrated to more securely retain key 28 in position after it has been driven home.

In each of the forms of the invention the wedge key is provided with a plurality of holes 31 adapted to receive a cotter pin 32 to lock the key in position. Each modification embodies a very simple device comprising relatively few parts and arranged to be applied to a rail at any point without drilling the latter for bolts or other attaching elements. The only tool required for application or removal of the device is a maul or hammer or any instrument with which a blow may be struck. The device is easily removed and shifted to another point as is frequently required on repair track work. If the installation is to be permanent, the member resting on the rail may be spot welded thereto as indicated at W. The device has a substantial bearing along the top face of the rail which tends to resist any overturning of the member under the forces applied thereto and, as previously pointed out, the wedge structure makes a single form of the device applicable to rails of different widths and heights.

The details of the invention may be further modified without departing from the spirit of the invention and the exclusive use of such modifications as come within the scope of the claims is contemplated.

What is claimed is:

1. In a device of the class described, a body part constructed to sit on top of a rail and to engage a car wheel, and means for holding said part to the rail including a wedge structure disposed to underlie the rail.

2. In a device of the class described, a body part constructed to sit on top of a rail and to engage a car wheel, and means for holding said part to the rail including elements extending downwardly from opposite sides of said part and means extending across the

lower portions of said elements and constructed to be positioned therein to seat against the bottom of the rail and to move to wedge said elements downwardly.

3. In a device of the class described, a body part constructed to sit on top of a rail and to engage a car wheel, and means for holding said part to the rail including cooperating elements disposed to underlie the rail and movable along each other to accommodate rails of different heights and to wedge said part against the rail.

4. A device as described in claim 2 in which the downwardly extending elements have vertical surfaces disposed to contact with the face of a rail tie.

5. A device as described in claim 2 in which a plurality of the downwardly extending elements are provided at spaced points along the body of the device and each element is arranged to engage the face of a respective tie.

6. A device of the class described comprising two complementary upright members with their forward edges shaped to engage the contour of a car wheel and with a substantial portion of their opposing faces abutting each other, said faces being shouldered to provide a seat for engaging a rail with the sides of the shoulders projecting downwardly, and means for engaging the bottom of the rail and the lower portions of said sides to wedge said members in place.

7. A device as specified in claim 6 in which the downwardly projecting sides of the wheel engaging members have their rear edges arranged to engage the face of a rail tie.

8. In a wheel stop, a wheel engaging body member constructed to rest upon the rail substantially throughout its length, holding elements constructed to extend downwardly from said member at the sides of the rail at points spaced longitudinally of said member, and wedge devices engaging the lower portions of said elements and constructed to contact with the underside of the rail.

9. A device of the class described comprising a wheel engaging member disposed to lie along the top of a rail, an inverted V-shaped yoke extending over a portion of said member and downwardly therefrom, and a rail bottom engaging and wedging structure extending across and through the sides of the lower portion of said yoke.

10. A device as specified in claim 9 in which wedging structure includes a plurality of parts interlocked with each other and with the yoke so as to retain the wedging structure tightly in wedge position.

11. In a device of the class described, a body having a part arranged to engage the top of a rail, means for holding said part to the rail including a wedge structure cooperating with the bottom of the rail, said body including a pivotally mounted wheel engag-

ing member, and a spring structure confined between said part and member.

12. In a device of the class described, a
5 body part arranged to rest on the top of a
rail, a yoke with its crossbar overlying said
part and with its legs extending downwardly
therefrom, a wedge for engaging said legs
and the bottom of the rail, said body includ-
10 ing a wheel engaging member pivoted on
said crossbar, and a spring structure com-
pressed between said part and member.

In testimony whereof I hereunto affix my
signature this 26th day of July, 1932.

ARNOLD H. TOLD.

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