Feb. 4, 1947. W. H. GREENFIELD 2,415,131

RAILWAY TRACK HEATER

Filed May 30, 1944

Fig. 1.

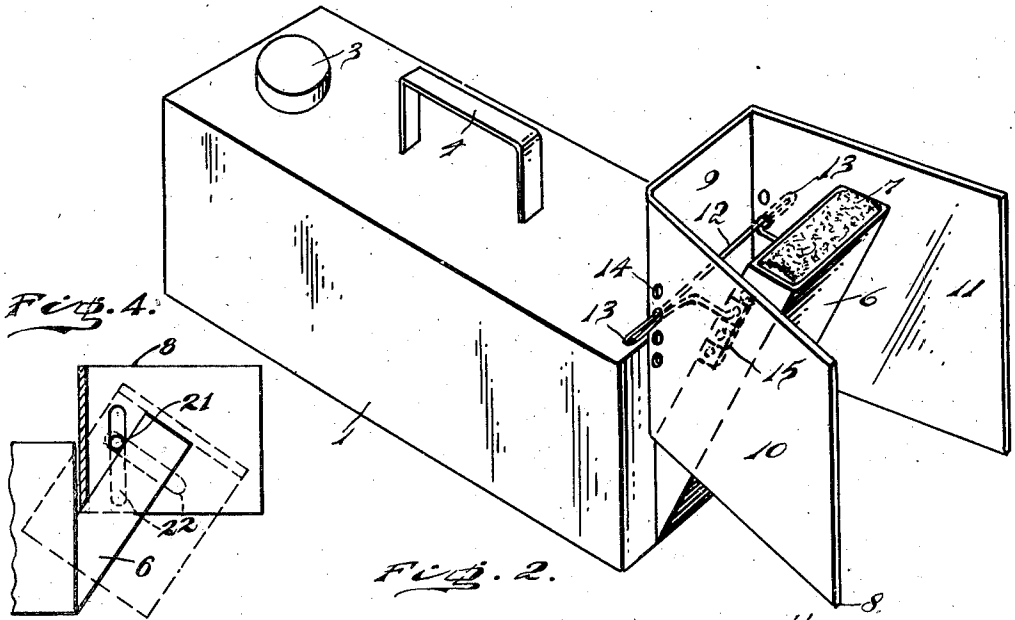


Fig. 4.

Fig. 2.

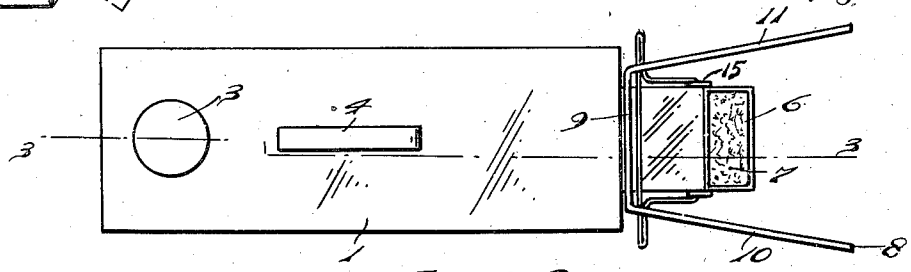
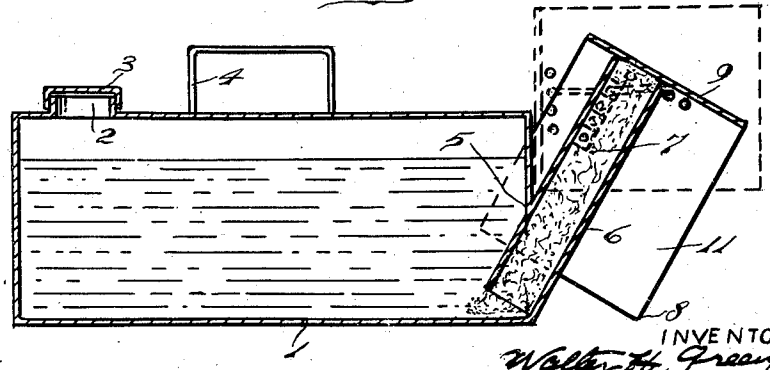


Fig. 3.



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RAILWAY TRACK HEATER

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5 Claims. (Cl. 158—94)

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The object of my invention is to devise a novel railway track heater which can be economically manufactured and which will withstand the rough usage to which heaters of this type are subjected when in use.

A further object of the invention is to devise a novel heater wherein the fuel tank is provided with a novel construction and arrangement of spout and with novel means for extinguishing the flame by closing the upper end of the spout.

A further object of the invention is to devise a novel flame guard which has a double function. In one position it serves as a flame guard and in another position it serves as a flame extinguisher.

A further object of the invention is to mount the flame guard in a novel manner so that it is readily detachable from the fuel tank.

With the foregoing and other objects in view as will hereinafter clearly appear, my invention comprehends a novel railway track heater having a novel construction and arrangement of wick receiving spout, and having novel means for effecting the extinguishing of the flame.

Other novel features of construction will appear in the detailed description and the appended claims.

For the purpose of illustrating the invention, I have shown in the accompanying drawing preferred embodiments thereof which in practice will give satisfactory and reliable results. It is, however, to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and the invention is not limited to the exact arrangement and organization of these instrumentalities as herein shown.

Figure 1 is a perspective view of a railway track heater, embodying the invention.

Figure 2 is a top plan view.

Figure 3 is a sectional elevation showing the flame guard in its flame extinguishing position, the section being taken on line 3—3 of Figure 2.

Figure 4 is a side elevation of another embodiment of the invention, the guard being shown in section.

Similar numerals of reference indicate corresponding parts.

Referring to the drawing:

1 designates a fuel tank or container which is preferably made of plates welded together at their juxtaposed edges. The tank 1 has a filling opening 2 for the fuel and the opening has a closure 3. 4 is a carrying handle welded to the top of the tank.

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One end plate or wall is cut away at its lower portion as at 5 to receive a spout 6, which extends into the fuel in the tank and is welded into fluid tight engagement with its end plate. The spout extends forwardly in an upward direction beyond the tank so that the flame is directed away from the tank and towards the rail to be heated. The spout has a conventional wick 7 which extends into the fuel in the tank.

A flame guard 8 has a back plate 9 and forwardly diverging side plates 10 and 11, and is mounted on the spout in a novel manner. A novel pivot member 12 in the form of a wire or rod is bent upon itself to form double end portions 13 to be received in selected apertures 14 in the side plates 10 and 11. The free end portions of the member 12 are bent outwardly and then inwardly towards each other to be received in pivot bearings 15 welded to opposite sides of the spout. I preferably provide a number of holes or apertures 14, one above the other, in the plates 10 and 11, and a number of pivot bearings, one above the other, so that the position of the flame guard can be adjusted as may be desired.

The back wall of the flame guard rests on the spout when the flame guard is in its flame directing position.

In the embodiment seen in Figure 4, I have shown a different manner of mounting the flame extinguisher 8 on the spout. A pivot member 21 is welded to the spout and its ends extend through slots 22 in the side plates, so that the flame guard 8 can be moved from its flame directing position to cover the spout.

The operation will now be apparent to those skilled in this art and is as follows:

Referring first to the embodiment seen in Figures 1 to 3 inclusive, the flame guard in Figure 1 has its rear wall resting on the spout and is in its flame directing position.

If it is desired to extinguish the flame, the guard is moved on its pivots from the position seen in Figure 1 to that shown in Figure 3 so that the flame is extinguished and the spout covered by the guard.

The operation of the embodiment seen in Figure 4 is similar to that already described in reference to Figures 1, 2 and 3. In one position the flame guard acts as a flame director. When swung over to cover the spout it acts as a flame extinguisher.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a railway track heater, a fuel tank, a

spout opening into the tank near its bottom and extending upwardly away from and above the tank, a wick in the spout, and a flame guard movably mounted on the spout in advance of the tank to act in one position as a flame guard and in another position to cover the upper end of the spout to act as a flame extinguisher.

2. In a railway track heater, a fuel tank, a spout opening into the tank near its bottom and having pivot bearings at opposite sides, a wick in the spout, a flame guard having a rear wall and forwardly projecting side walls, and a pivot member connected with said side walls and engaging said bearings, said flame guard in one position having its rear wall covering the spout and wick to extinguish the flame and when acting as a flame guard having the bottom of its rear wall resting on the spout.

3. The construction specified in claim 2 wherein a plurality of vertically spaced pivot bearings are provided on opposite sides of the spout to selectively receive the pivot member.

4. The construction specified in claim 2 wherein the side walls of the flame guard have a plurality of vertically spaced openings to selectively receive the pivot member.

5. In a railway track heater, a fuel tank, a spout opening into the fuel tank and extending upwardly and forwardly, a wick in the spout, a flame guard having a rear wall and forwardly projecting side walls having a vertically extending slot in each side wall, and a pivot pin fixed to the spout and having its ends extending into said slots, said flame guard in its operating position as a flame guard having its bottom wall resting on said spout and when moved forwardly on its pivot pin covering the upper end of the spout to act as a flame extinguisher.

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