Oct. 24, 1933. C. L. GLEASON 1,931,793

CARRIER AND HEATER FOR PAVEMENT CRACK FILLING BUCKETS

Filed Dec. 8, 1930

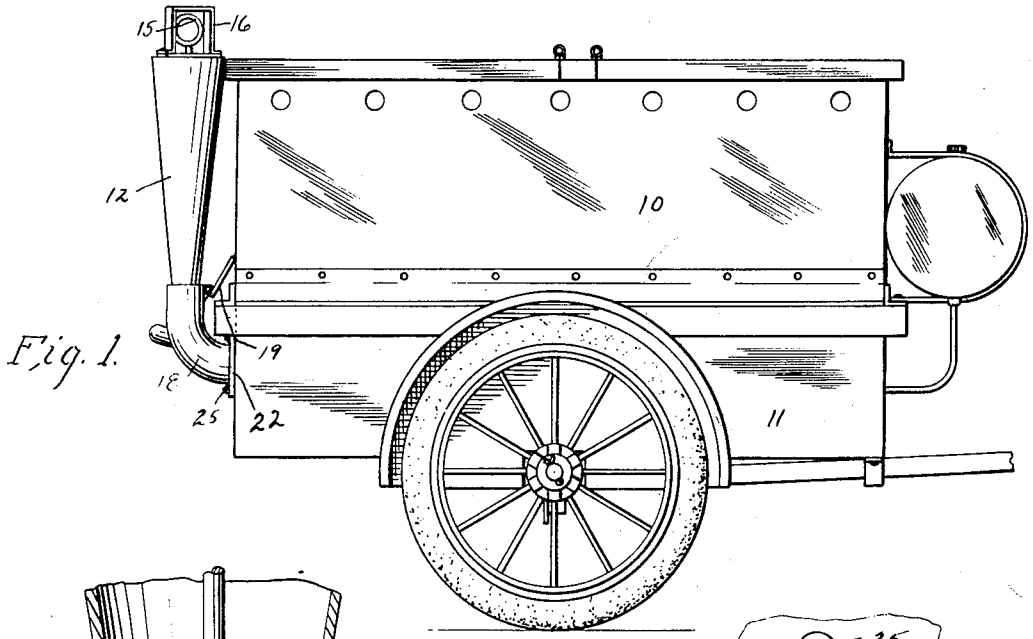


Fig. 1.

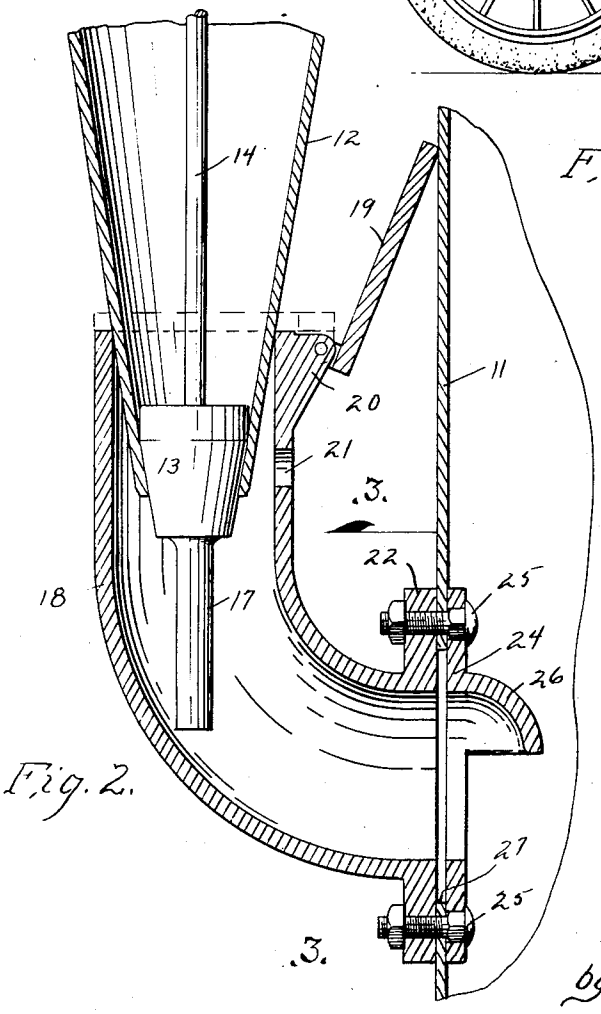


Fig. 2.

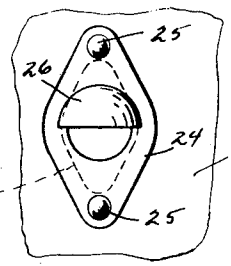


Fig. 4.

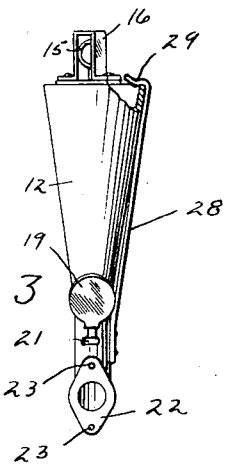


Fig. 3

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Patented Oct. 24, 1933 1,931,793

UNITED STATES PATENT OFFICE

1,931,793

CARRIER AND HEATER FOR PAVEMENT CRACK FILLING BUCKETS

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Application December 8, 1930. Serial No. 500,848

2 Claims. (Cl. 94—42)

In connection with the maintenance of concrete highways it is now customary to employ the so-called tar kettle mounted upon a suitable running gear for transportation and provided with a fire box for keeping the tar within the kettle in moulten condition.

It is also customary to use pouring pots for the tar and these are provided at their lower ends with a valve through which the moulten tar may run when the valve is open, and this stream of tar may be easily directed into cracks in the pavement.

Considerable difficulty and delay has been occasioned heretofore in the use of these devices, due to the fact that the tar within the pouring pots, especially at the valve at the lower end, soon becomes cool and the valve freezes in closed position to prevent further flow of the tar.

The objects of my invention are to provide a heater device of simple, durable and inexpensive construction to be permanently attached to the fire box of a tar kettle, and to detachably receive the lower end of the pouring pot and hold it in position where the heat from the fire box passes around the valve portion of the pouring pot and keeps the tar in the pouring pot in melted condition. This heater device also provides a convenient means for carrying the pouring pot with the tar kettle from place to place.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 shows a side elevation of a tar kettle having my improved heater device applied thereto with a pouring pot in position thereon for transportation with the tar kettle.

Figure 2 shows an enlarged vertical sectional view illustrating part of the tar kettle with my improved heating device applied thereto and a pouring pot mounted in the heater.

Figure 3 shows a side elevation of my improved heater and the pouring pot in position therein taken from the side which is attached to the fire box of the tar kettle.

Figure 4 shows in elevation the inner member of the heater looking toward the adjacent wall of the fire box. The dotted lines show the opening in the fire box through which this inner heater member may be inserted.

Referring to the accompanying drawing, I have used the reference numeral 10 to indicate generally the vehicle containing the tar kettle and including in its construction a fire box indicated by the numeral 11.

The pouring pot comprises a conical body 12 open at its upper end and having a valve 13 fitted into its lower end, and movable upwardly within the pouring pot. A rod 14 is attached to the valve 13 which extends upwardly above the top of the pouring pot where it is provided with a ring 15, preferably mounted within a handle 16 fixed to the top of the pouring pot. Below the valve 13 is a rod 17 over which the tar may flow, and which serves to guide the tar into cracks in the pavement.

The tar kettle vehicle and the pouring pot just described are of the ordinary construction now in general use.

My improved heater device comprises a hollow body indicated by the numeral 18, and is substantially elbow shaped. At its upper end is a hinged cover 19 hinged on the lugs 20 and so arranged that when in open position it will lie against the adjacent side of the fire box 11, and be wholly removed from the opening at the top of the heater body, and this open upper end of the heater body is of such size and shape as to receive the lower end of the pouring pot which substantially seals the upper end of the heater.

Near the upper end of the heater and preferably on the inner face thereof is a circulating opening 21. At the lower end of the heater is a flange 22 designed to be fitted against the outer surface of the fire box 11 and is provided with bolt holes 23.

The inner member of the heater comprises a flat body portion 24, which is oval in outline, as indicated in Figure 4, and has a central opening corresponding in size with the hollow interior of the heater body 18. It is provided at its upper and lower ends with bolt openings through which the bolts 25 may be inserted from the inside of the fire box through openings in the fire box and through the openings 23, for firmly clamping the heater to the wall of the fire box.

At the top portion of the member 24 is a deflector hood 26 for directing heat from the interior of the fire box out into the heater. The opening formed in the fire box is preferably oval in outline, as indicated by dotted lines at 27, and is of such size that the inner heater member 24 may be inserted through it from the outside of the fire box with its narrowest dimension passing through the widest dimension of the open-

ing, and then this heater may be turned to the upright position shown in Figure 4 and bolts placed in position, all of which may be done by an operator on the outside of the fire box.

Fixed to one side of the heater body is a spring latch arm 28 extended upwardly and having an inwardly turned upper end at 29, designed to engage the top of the pouring pot to firmly hold it in an upright position so that during transportation of the heater, the pouring pot will be firmly held in position.

In practical use, the cover 19 may be closed to prevent the escape of heat from the fire box. When it is desired to use the heater, the operator simply opens the cover 19 and places the pouring pot in position within the heater, as shown in Figure 2. When it is in this position, heat from the fire box will be directed by the hood 26 into the hollow interior of the heater, and a small portion of it may flow out through the opening 21, which is large enough to secure a circulation of the heat at the upper end of the heater. Obviously when the pouring pot is in this position, the tar in the lower portion thereof, and especially surrounding the valve 13 will be kept in moulten condition.

After a short period of use of the pouring pot, and frequently before the contents have been wholly discharged, the tar in the bottom of the pouring pot, especially adjacent to the valve, will freeze, and when this occurs, an operator simply places the pouring pot within the heater, and in a short time the tar is again placed in moulten condition and the pouring pot may again be used in the ordinary manner.

When transporting the heater, the pouring pot is firmly held in proper position by the spring latch device 28.

I claim as my invention:

1. A carrier and heater for pavement crack filling buckets comprising in combination a hollow body formed of a substantially horizontally arranged opening at its lower end to be secured to and fitted around an opening in the combustion chamber of a heater, the upper end of the body portion being formed with a vertical opening shaped and designed to receive and support a crack filling bucket, a hinged cover for the top of said body portion, said body having a circulating opening formed therein near the top thereof and so positioned that it will permit a circulation of heat through the body portion and outwardly and around the lower end of a crack filling bucket when the latter is supported in the open upper end of the body portion.

2. A carrier and heater for pavement crack filling buckets comprising in combination a hollow body formed of a substantially horizontally arranged opening at its lower end to be secured to and fitted around an opening in the combustion chamber of a heater, the upper end of the body portion being formed with a vertical opening shaped and designed to receive and support a crack filling bucket, a hinged cover for the top of said body portion, said body having a circulating opening formed therein near the top thereof and so positioned that it will permit a circulation of heat through the body portion and outwardly and around the lower end of a crack filling bucket when the latter is supported in the open upper end of the body portion, and a plate designed to be fitted to the interior of the heater in line with the lower end of said body portion and formed with a hood projecting inwardly and downwardly to direct heat from the interior of the heater into said body portion.

CLARENCE L. GLEASON.