Nov. 18, 1947. L. F. SAYLES 2,431,082

MANHOLE ADAPTER

Filed Feb. 6, 1945

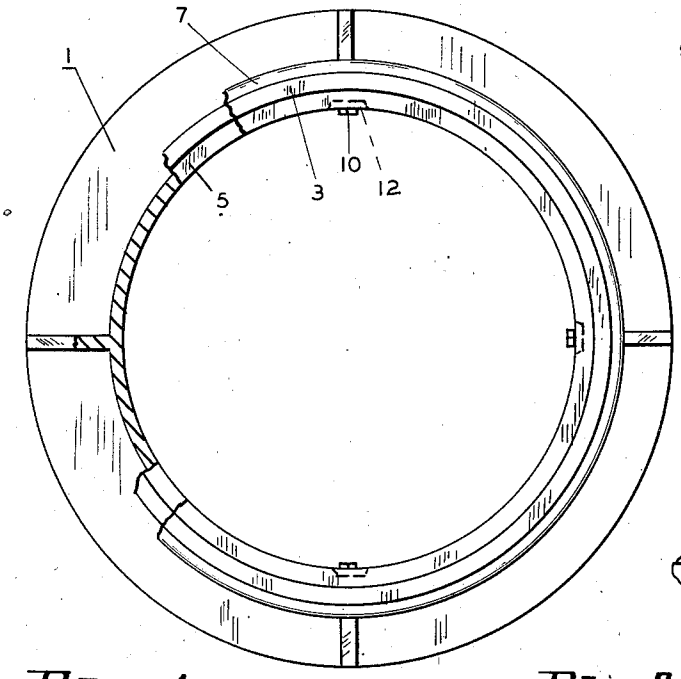



Fig. 1

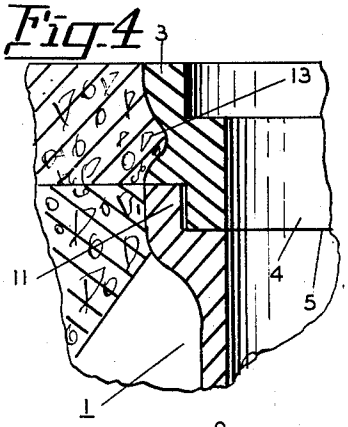



Fig. 4

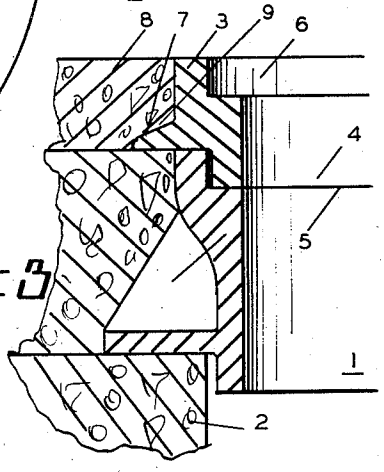



Fig. 3

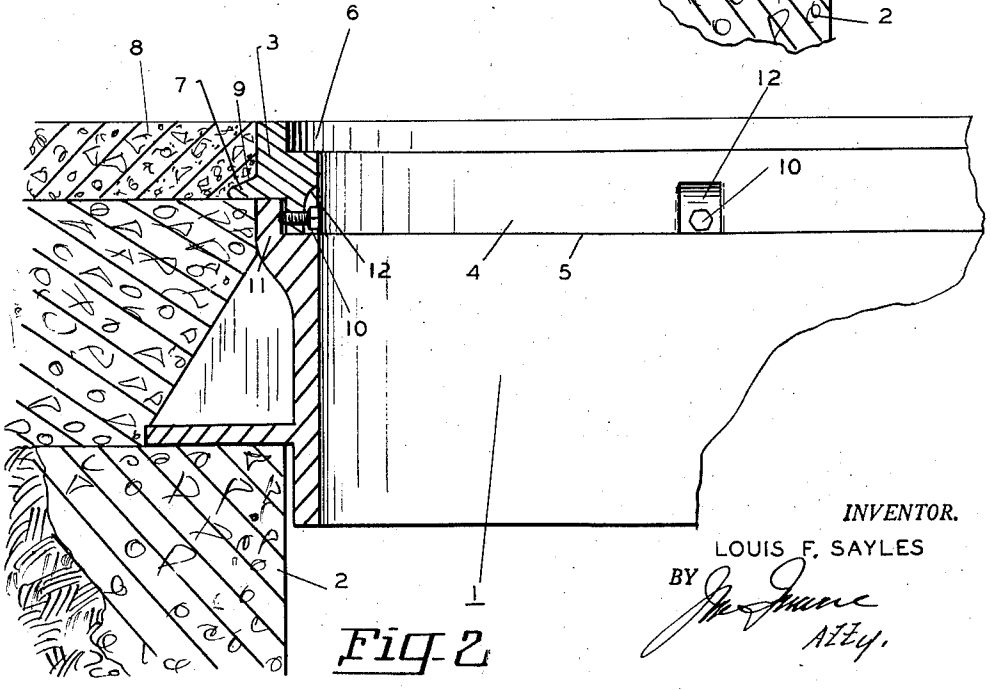



Fig. 2

INVENTOR.
LOUIS F. SAYLES
BY
Atty.

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## MANHOLE ADAPTER

Louis F. Sayles, Portland, Oreg., assignor to
Louise P. Sayles, Portland, Oreg.

Application February 6, 1945, Serial No. 576,448

1 Claim. (Cl. 94—34)

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This invention relates to manhole frames and is particularly adapted to manhole frames used in streets and highways.

The primary object of the invention is to raise the height of the manhole cover when the street or highway is resurfaced and this is accomplished by supplying an extension ring for raising the manhole frame to the surface of the resurfaced pavement.

This application is an improved method of securing the extension ring to the manhole frame from that disclosed in my pending application, Serial Number 558,809, filed October 16, 1944.

A further object of this improvement over the pending application is to simplify the method of locking the extension ring in place over the present manhole frame, providing for more clearance within the manhole, which is already crowded for space, and also reducing the weight of the extension ring, which is an important item in the merchandising of this invention.

These and other incidental objects will be apparent in the drawings, specifications and claim.

Referring to the drawings:

Figure 1 is a plan view of a standard manhole frame, having my new and improved extension ring mounted thereon, parts broken away for convenience of illustration.

Figure 2 is an enlarged fragmentary sectional view of a standard manhole frame in place, having my new and improved extension ring mounted thereon and showing the resurface pavement abutting up against the ring holding it in place.

Figure 3 is another preferred form of extension ring wherein locking bolts have been eliminated.

Figure 4 is still a further embodiment of my invention, illustrating the different method of maintaining the ring in place on the manhole frame by the resurface pavement.

In the drawings:

1 is the standard manhole frame as is commonly used in streets and highways, mounted upon the manhole frame casing 2. My new and improved extension ring is indicated at 3, having a lower flange whose lower edge 4 rests on the upper surface 5, where the lid of the manhole frame formerly rested. The lower flange of said ring 3 is narrower than the ledge 5, so that said flange loosely fits within said frame, as shown in Figures 2, 3 and 4. A suitable ledge 6 is formed within the extension ring 3 for receiving the lid, not here shown.

A flange 7 is formed integral within the ring 3 to rest on the top of said frame and extends outwardly around the periphery of the ring and

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provides a ledge upon which the resurfacing pavement 8 rests at 9, maintaining the extension ring upon the manhole frame proper. Set screws 10 may be provided in the lower portion 4 of the ring 3 for engaging the inner wall 11 of the manhole frame, assisting in the maintaining of the ring in place within the spaced wall, 11, of the frame. Countersunk spaces 12 are provided for receiving the set screws 10, providing a smooth surface within the manhole frame.

Referring to Figure 3, I show practically the same construction as that shown in Figure 2, with the exception that the set screws 10 are eliminated. The ring is held in place by the resurfaced pavement 8 resting upon the flange 7 of the ring 3. The flange 7 does not necessarily have to form a complete circle around or about the ring, but it may be formed of segments performing the service that they are intended to perform, mainly that of holding the extension ring snugly within the upper part of the manhole frame.

Figure 4 shows another preferred form, wherein the outer surface of the ring 3 is countersunk at 13 around its entire circumference. The resurface pavement will extend into this depression and securely hold the ring in place.

Either of the forms I have illustrated and described may be employed, still coming within the the scope of my claim, mainly the feature of the resurfacing pavement maintaining the extension ring mounted above the manhole frame securely in place, thereby raising the lid of the manhole frame to the surface of the new pavement without removing the old manhole frame from its former position, thereby eliminating considerable construction expense.

Again stating the primary object of my invention which is the raising of the lid of the manhole frame to the level of the resurface pavement without altering the position of the manhole frame proper by simply providing an extension ring or collar mounted upon and above the manhole frame.

I claim:

A manhole adapter in combination with a manhole casing having a smooth bore vertical sleeve portion for defining the entrance to the manhole and having an offset ledge surrounded by an upstanding edge at the top thereof for the original reception of a manhole cover, said adapter comprising an annular body which has a lower flange portion narrower than said offset ledge in said casing and that is shaped to overlie and fit therein, said body being offset radially of its length to overlie the upstanding edge and the top of the

casing and to provide an offset ledge to receive a cover, a peripheral flange extending radially from the outer surface of said body in line with said radial offset to form a base to rest on the top of said upstanding edge of the casing and extending beyond said casing for anchoring with paving material surrounding the manhole, said body below said cover ledge having a smooth interior surface of a diameter substantially the same as that of the sleeve portion of the casing, set screws spaced peripherally around and extending radially through the lower flange portion of said lower body flange and gripping the upstanding edge of the casing to secure the adapter thereto, and recesses in the interior surface of said body and surrounding said set screws to receive the heads thereof so that the interior surface of the manhole will be smooth and devoid of projections.

LOUIS F. SAYLES.




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