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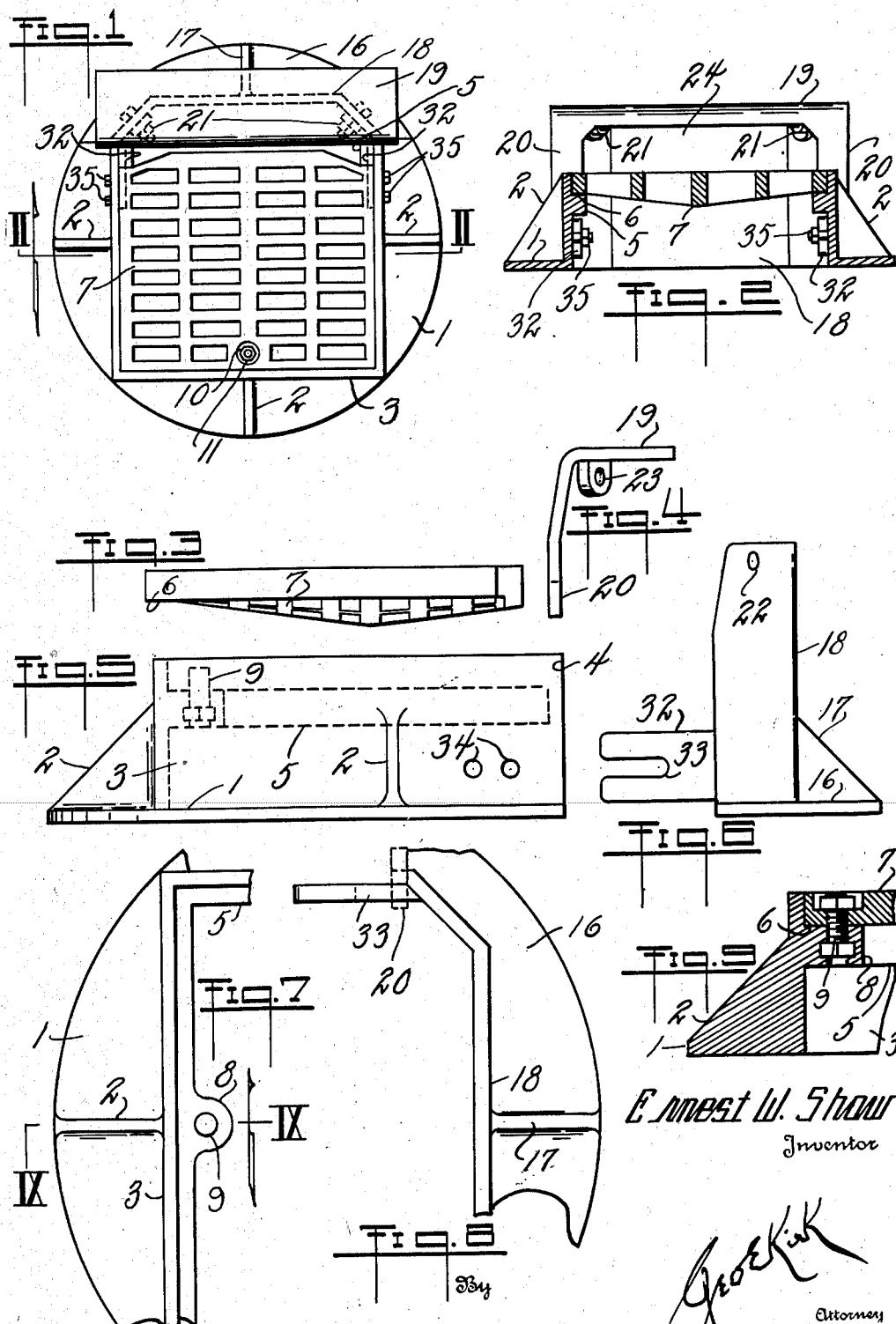
E. W. SHAW

2,159,752

CURB INLET

Filed June 6, 1938

2 Sheets-Sheet 1



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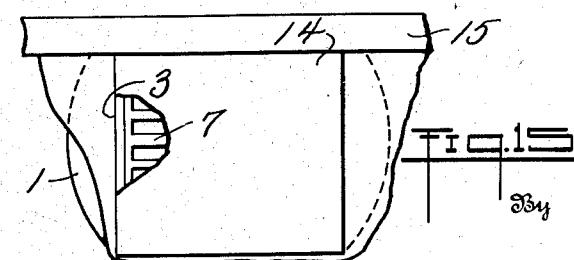
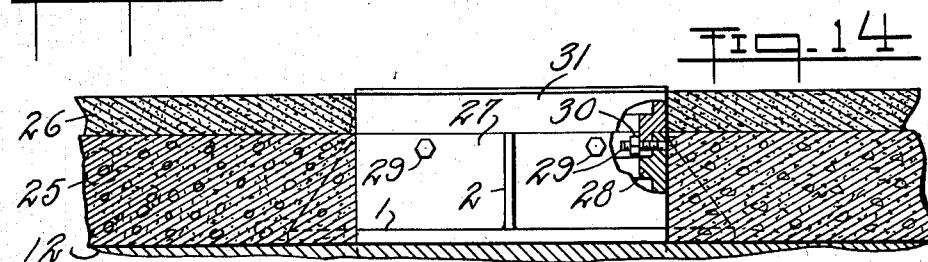
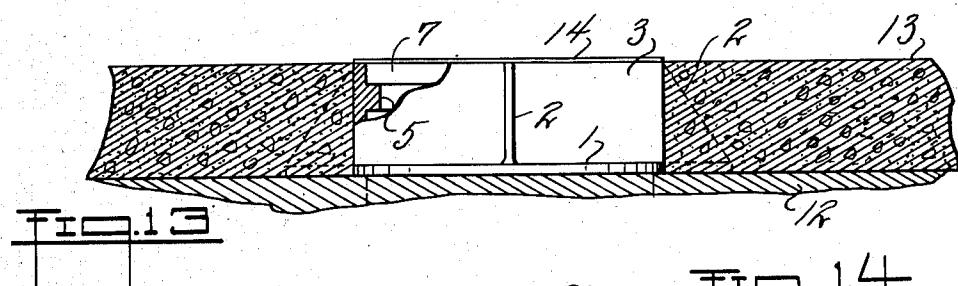
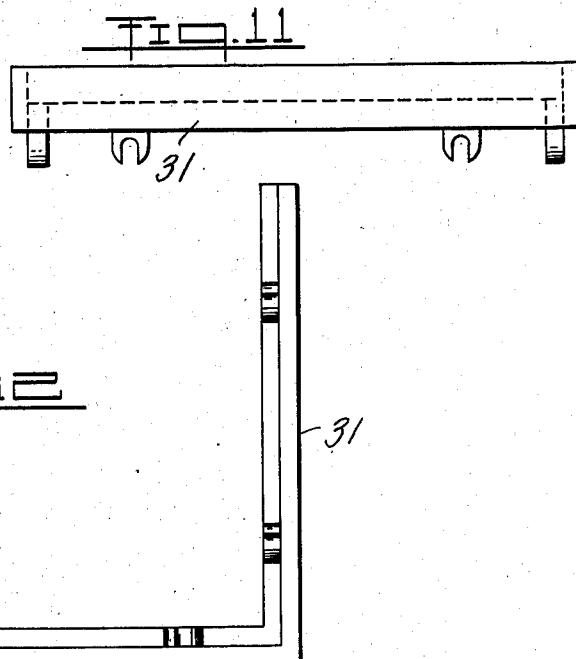
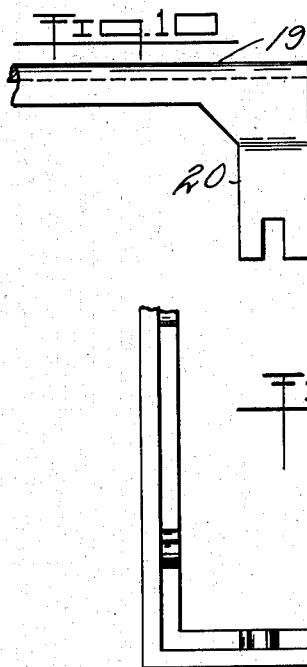
E. W. SHAW

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CURB INLET

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,159,752

CURB INLET

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Application June 6, 1938, Serial No. 212,106

2 Claims. (Cl. 182—6)

This invention relates to surface water disposal from pavements.

This invention has utility when incorporated in sewer waste intake assembly and connection 5 in the form of grating and curb inlet to the sewer or duct.

Referring to the drawings:

Fig. 1 is a plan view of an embodiment of the invention as the elements of a paving fixture;

10 Fig. 2 is a section on the line II—II, Fig. 1, with the main frame and grating, showing the curb section in elevation;

Fig. 3 is a side elevation of the grating;

15 Fig. 4 is an end elevation of the curb outlet and finish portion;

Fig. 5 is a side elevation of the main frame;

Fig. 6 is an end elevation of the supplemental frame adapted to fit with the main frame; these 20 Figs. 3, 4, 5 and 6 being in distributed grouping;

Fig. 7 is a fragmentary plan view of a portion 25 of the main frame of Fig. 5;

Fig. 8 is a fragmentary view in plan of a portion of the supplemental or curb frame of Fig. 6;

Fig. 9 is a section on the line IX—IX, Fig. 7, 30 showing assembly of the grating with the main frame;

Fig. 10 is a fragmentary front elevation of the curb finish;

Fig. 11 is an elevation of the front or cross 35 portion of the sectional frame to be mounted on the primary frame in carrying up from pavement foundation to pavement height;

Fig. 12 is a fragmentary plan view of the sectional U-frame of Fig. 11;

Fig. 13 is a view, with parts broken away, of the foundation frame installed in the pavement 40 for finish flush with the pavement;

Fig. 14 is a view similar to Fig. 13, of the foundation frame installed in a pavement wherein 45 there is supplemental surfacing and extension of the frame from the frame base or major section; and

Fig. 15 is a fragmentary plan view, wherein the fixture may be as to the main frame installed 50 with curb continuity line running therewith and the curb portion of the frame to be later or subsequently installed.

Partially circular lower base flange 1 (Fig. 1) has uprising brace flanges 2 therefrom to three-sided frame portion 3 forming U with open side 4 (Fig. 5). This U-shaped main frame portion 3 on the inner side is inwardly extending flange 5 (Fig. 7) upon which may rest bounding flange 6 of grating 7. In the forming of this primary 55 frame, say of cast iron, there may be anchored

therewith in lug 8 upstanding threaded portion or bolt 9 so that at seat 10 in the grating 7, nut 11 may coact with this bolt 9 in anchoring this grating in position.

In carrying out the invention herein upon 5 pavement base 12 (Fig. 13), this primary frame 3 may be located. The running of pavement foundation as cement 13 is then effected continuously therealong and thereover, say as protected by cardboard sheet 14 (Fig. 15) in conjunction with curb marking pavement limit form 15, which, as the pavement is run, may be taken up for the installation of curb, whether cast of concrete or trimmed stone curbing. In either event, as the curbing form 15 is removed, supplemental frame having base flange 16 (Fig. 6) and upright brace portion 17 with upstanding supplemental frame 18 may be placed in position to have the base flange 16 register with the base flange 1 of the primary frame and this upright 15 portion 18 extend between the lugs of the U providing space from open portion 4. This upright portion 18 is in the curb line thus ready to receive finish or trim 19 (Figs. 4, 10) along the curb top with terminal depending portions 20 to ride astride the upper portion of the free ends of the flange 3 and there be anchored in position by bolts 21 from openings 22 in the upright 18 and through openings 23 in the under side of the curb finish 19. There is accordingly left in register position clearway or opening inlet 24 under this curb finish and laterally from the grating 7 as the major port for this waste water connection 25 flow from the pavement surface as well as through the grating 7.

There is economy in the installation hereunder for the reason that the primary frame may be set on the pavement base 12 and the run of pavement foundation 13 be continuous over this primary frame with the primary frame thereby 30 anchored with and as a unit of the pavement proper. This is simply effected in the type of concrete pavement wherein the foundation is the surface direct to the pavement face.

In other instances wherein on pavement base 45 12 there is laid foundation 25 (Fig. 14) in order that there may be finish surface whether of block or asphalt 26, it is in order hereunder similarly to place supporting flange 1 on the base 12. However, in lieu of the frame 3 there is minor frame 50 27 having inwardly extending lug or flange portion 28 with bolts 29 which may have nuts 30 to anchor sectional U-frame 31 as the carry-up portion from the pavement foundation 25 to position flush with the surface of the pavement 55 26.

These bolts 29 may be inserted in the primary frame and held in position by the concrete so that the U-section 31 may be anchored therewith.

In the layout wherein the pavement foundation 25 falls short of the extent of the finished pavement surface, the clearway in the U-frame is not placed with a grating but with an insert strip or plate, say of sheet metal, on the lower ledge to bring to flush position in order that pavement continuity may be thereacross. Upon locating then placing U-frame 31 as a section to complete the primary frame, the grating may be installed as normally thereon and this followed with the curbing section in the sequence after the pavement foundation which has effected the anchoring of the primary frame.

While the pavement base 12 may be continued under the curb line or form 15 in thereby providing support for the supplemental frame base flange 16, there is preferred additionally effecting an interlock between this primary frame having the base 1 and this supplemental frame having the base 16, which interlock is herein shown as projecting lug 32 (Fig. 6) having slot 33 in providing a fork, one at the inside of each of the legs of the U-frame 3. When so brought into position as to the bolt holes 34 in the frame 3, locking may be effected between these fork ex-

tensions 32 and the frame 3 by bolts 35. These bolts 35 are anchored in the cement for the application of the nuts thereto after the placing of this supplemental curb section.

What is claimed and it is desired to secure by Letters Patent is:

1. The method of providing sewer waste connection from a pavement comprising, locating a U-shaped frame portion for a sewer inlet adjacent a curb line, running a pavement therepast in pavement continuity to anchor said frame with simultaneously defined clearance for curbing, thereafter providing curb side addition for the frame portion to complete the frame by thrusting the addition horizontally into interlocking relation against vertical shifting out of register, and establishing a curb in common with said addition.

2. A pavement waste water fixture embodying a U-shaped main frame determining a base level, and a minor coincident base level additional frame shiftable horizontally into closing position between the legs of the main U-frame, said minor frame having parallel projecting arms located by said shifting into interlocking position with the legs to position the frames for retaining their base portions in a common plane.

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